

Application No. 10/809,768
Amendment dated January 3, 2007
Reply to Office action dated October 5, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A bone implant with surface indicator, said implant comprising:
 - a top surface and a bottom bone-contacting surface;
 - at least two fastener holes extending from said top surface to said bottom surface, at least one hole having a first diameter at said top surface; and
 - a recessed region recessed in said top surface that provides a tactile indicator for identifying the top surface of the implant, ~~said recessed region extending at least partially between said at least two fastener holes, said recessed region intersecting at least one of said fastener holes, and said recessed region having a width measured at said top surface of said implant that is no greater than said first diameter of said hole.~~
2. (original) The implant of claim 1, wherein the top surface recess region is elongate in shape.
3. (previously presented) The implant of claim 1, wherein said implant comprises at least one elongate plate section.
4. (withdrawn) The implant of claim 3, wherein said implant has a form selected from the group consisting of an L-shape, a Y-shape, a double Y-shape and an X-shape.
5. (withdrawn) The implant of claim 3, wherein said implant is arcuately curved in shape.
6. (withdrawn) The implant of claim 2, further comprising at least two top surface recess regions.
7. (withdrawn) The implant of claim 6, wherein said implant is in the form of a substantially square mesh plate comprising four sides and at least two rows of at least two fastener holes in each of said rows, said at least two top surface recesses disposed substantially perpendicular to each other.

Application No. 10/809,768

Amendment dated January 3, 2007

Reply to Office action dated October 5, 2006

8. (withdrawn) The implant of claim 7, wherein said at least two top surface recesses are disposed diagonally to said sides of said implant.

9. (withdrawn) The implant of claim 1, wherein said top surface recess is substantially circular in shape.

10. (withdrawn) The implant of claim 9, further comprising: said implant having central body portion; and a plurality of arms extending radially and angularly outward from said central body portion, said at least two fastener holes each being disposed in two different one of said arms, whereby said implant is capable of being used as a burr hole cover.

11. (original) The implant of claim 1, wherein said at least two fastener holes are countersunk.

12. (original) The implant of claim 11, further comprising said countersunk holes having a first inclined wall with a first angle and an adjacent second inclined wall with a second angle, said second angle being larger than said first angle.

13. (original) The implant of claim 12, wherein said first angle is about 20 degrees and said second angle is about 140 degrees.

14. (withdrawn) The implant of claim 3, further comprising said implant having a length and a width, and at least one transverse slot located between said at least two fastener holes and extending across at least part of said width of said implant.

15. (withdrawn) The implant of claim 14, wherein said transverse slot extends from said top surface to said bottom surface of said implant.

16. (previously presented) The implant of claim 2, wherein said recessed portion has a cross-sectional shape selected from the group consisting of V-shaped, concave-shaped, and U-shaped.

17. (original) The implant of claim 1, further comprising at least a portion of the implant having a side edge chamfer.

18. (original) The implant of claim 1, wherein said implant is made from a resorbable material.
19. (original) The implant of claim 18, wherein said resorbable material is a copolymer selected from the group consisting of 70/30 poly (L, D/L-lactide) and 85/15 poly (L-lactide-co-glycolide).
20. (currently amended) A bone implant with surface indicator, said implant comprising:
 - at least one generally elongate section having longitudinal axis, a top surface, and a bottom bone-contacting surface;
 - at least two fastener holes in said at least one elongate section and extending from said top surface to said bottom surface, at least one hole having a first diameter at said top surface; and
 - at least one elongate groove recessed in said top surface of said implant and extending partially between said top and bottom surfaces, ~~said elongate groove extending at least partially between said at least two fastener holes, said elongate groove intersecting at least one of said fastener holes, and~~ said groove having a width measured at said top surface of said implant that is no greater than approximately said first diameter of said hole;

whereby said elongate groove provides a tactile indicator for identifying said top surface of said implant.
21. (currently amended) The implant of claim 20, wherein said elongate groove intersects both of said at least two fastener holes.
22. (previously presented) The implant of claim 20, wherein said elongate groove has a cross-sectional shape selected from the group consisting of V-shaped, concave-shaped, and U-shaped.
23. (withdrawn) The implant of claim 20, further comprising at least one elongate slot disposed in said at least one elongate section, said elongate slot disposed between said at least two fastener holes and extending transverse to the longitudinal axis of said at least one elongate section, said elongate slot further extending from said top surface to said bottom surface.
24. (original) The implant of claim 20, wherein said implant is a substantially straight plate.

Application No. 10/809,768
Amendment dated January 3, 2007
Reply to Office action dated October 5, 2006

25. (withdrawn) The implant of claim 20, wherein said implant has an arcuately curved shape.

26. (original) The implant of claim 20, wherein said implant is made from a resorbable material.

27. (withdrawn) A bone plate with surface indicator, said plate comprising: a top surface and a bottom bone-contacting surface; at least two fastener holes disposed in said plate and extending from said top surface to said bottom surface; at least one elongate groove recessed in said top surface of said plate and extending partially between said top and bottom surfaces, said elongate groove extending at least partially between said at least two fastener holes; and at least one elongate slot disposed in said plate and extending from said top surface to said bottom surface, said elongate slot disposed between said at least two fastener holes and extending across the plate transverse to the elongate groove, said elongate transverse slot intersecting said elongate groove; whereby said elongate groove provides a tactile indicator for identifying said top surface of said plate; and whereby said elongate transverse slot induces said plate to bend between the fastener holes.

28. (withdrawn) The bone plate of claim 27, wherein said plate is made from a resorbable material.

29. (withdrawn) The bone plate of claim 27, further comprising said plate having an elongate body portion and at least one adjacent elongate first head portion, said first head portion disposed at an angle to said body portion.

30. (withdrawn) The implant of claim 29, further comprising said plate having a second elongate head portion disposed at an angle to said first head portion.

31. (withdrawn) The implant of claim 27, wherein said plate has an arcuately curved shape.

32. (withdrawn) A bone plate with bending control, said implanting comprising: a top surface and a bottom bone-contacting surface; at least two fastener holes disposed in said plate and extending from said top surface to said bottom surface, said two fastener holes defining a longitudinal axis therebetween; and at least one elongate slot disposed in said plate and extending from said top surface to said bottom surface, said elongate slot disposed between said at least two fastener holes

and extending transverse to said longitudinal axis; whereby said elongate transverse slot induces said plate to bend between the fastener holes.

33. (withdrawn) The bone plate of claim 32, wherein said plate is made from a resorbable material.

34. (withdrawn) A method of contouring and attaching a resorbable implant with surface indicator to a bone comprising the steps of: providing a resorbable implant having a glass transition temperature (T_{sub.g}) that is higher than average human body temperature, said implant comprising: a) a top surface and a bottom bone-contacting surface; b) at least two fastener holes extending from said top surface to said bottom surface; c) a portion of said top surface being recessed and extending partially between said top and bottom surfaces, whereby said top surface recess provides a tactile indicator for identifying said top surface of said implant; raising the temperature of said implant to above the glass transition temperature (T_{sub.g}); touching said surfaces of said plate to find said top surface recess thereby identifying said top surface; deforming said plate to substantially conform to the anatomical shape of the bone with said top surface facing away from the bone; applying said plate to the bone; and attaching said plate to the bone.

35. (withdrawn) The method of claim 34, further comprising the steps of: providing fasteners; inserting said fasteners through at least some of said fastener holes, wherein said fasteners are used for attaching said plate to the bone.

36. (withdrawn) The method of claim 35, wherein said fasteners are screws or tacks.

37. (withdrawn) A bone fixation kit comprising: at least a first bone implant comprising: a) a top surface and a bottom bone-contacting surface; b) at least two fastener holes extending from said top surface to said bottom surface; and c) said top surface having a recessed region that provides a tactile indicator for identifying the top surface of the implant; and a plurality of fasteners for attaching said implant to bone.

38. (withdrawn) The kit of claim 37, wherein the top surface recess region is elongate in shape.

Application No. 10/809,768

Amendment dated January 3, 2007

Reply to Office action dated October 5, 2006

39. (withdrawn) The kit of claim 38, wherein the implant comprises at least one elongate plate section.

40. (withdrawn) The kit of claim 39, wherein said implant has a form selected from the group consisting of an L-shape, a Y-shape, a double Y-shape and an X-shape.

41. (withdrawn) The kit of claim 37, further comprising said implant having a length and a width, and at least one transverse slot located between said at least two fastener holes and extending across at least part of said width of said implant.

42. (withdrawn) The kit of claim 37, wherein said implant is made from a resorbable material.

43. (withdrawn) The kit of claim 37, wherein said fasteners include screws or tacks.

44. (withdrawn) The kit of claim 37, further comprising at least a second bone implant.

45. (withdrawn) The kit of claim 44, wherein said second bone implant has a different overall size than said at least first bone implant.

46. (withdrawn) The kit of claim 44, wherein said second bone implant has a different shape than said at least first bone implant.

47. (withdrawn) The kit of claim 44, further comprising at least a third bone implant.

48. (withdrawn) The kit of claim 47, wherein said third fixation device has a different shape than said at least first and second bone implants.

49. (withdrawn) The kit of claim 47, wherein said third fixation device has a different overall size than said at least first and second bone implants.

50. (currently amended) The implant of claim 1, wherein said recessed region ~~extends completely between~~ intersects said fastener holes.

51. (previously presented) The implant of claim 20, wherein said recessed region extends completely between said fastener holes.

52. (currently amended) A resorbable bone plate having top surface tactile indication comprising:
a body made of biologically resorbable material and having at least two spaced-apart sides;
a top surface and a bottom bone-contacting surface;
at least two spaced apart parallel sides;
at least two fastener holes extending from said top surface to said bottom surface, at least one hole having a first diameter at said top surface; and
an elongate recessed region recessed in said top surface that provides a tactile indicator for identifying the top surface of the implant, said recessed region spaced away from said sides of said plate and having a width measured at said top surface of said implant that is no greater than approximately said first diameter of said hole, and wherein said recessed region intersects said at least two fastener holes.

53. (previously presented) The bone plate of claim 52, wherein said groove has a cross-sectional shape selected from the group consisting of U-shaped, V-shaped, and concave-shaped.

54. (currently amended) A resorbable bone plate having top surface tactile indication comprising:
a body made of biologically resorbable material;
a top surface and a bottom bone-contacting surface;
at least two fastener holes extending from said top surface to said bottom surface, at least one hole having a first diameter at said top surface; and
a longitudinally-extending groove recessed in said top surface that provides a tactile indicator for identifying the top surface of the implant, said groove intersecting at least one of said holes, said groove having a width at said intersected hole being no greater than said first diameter of said hole.

55. (currently amended) A resorbable bone plate having top surface tactile indication comprising:
an elongate body made of biologically resorbable material and defining a longitudinal axis and two longitudinally-extending sides, the body having a length and width less than said length;
a top surface and a bottom bone-contacting surface;

at least two fastener holes extending from said top surface to said bottom surface, at least one hole having a first diameter at said top surface; and

an elongate recessed region recessed in said top surface that provides a tactile indicator for identifying the top surface of the implant, said recessed region spaced away from said sides of said plate and having a width measured at said top surface of said implant, and wherein said recessed region intersects one of the fastener holes; and

wherein said width of said plate is at least about three times said width of said recessed region.